

**IN THE CLAIMS:**

**Please amend Claims so as to read as follows:**

1. (Currently Amended) A liquid crystal display device, comprising:
  - a liquid crystal display element including:
    - a pair of substrates, and
    - a liquid crystal layer sandwiched by said substrates and  
~~constituted by a liquid crystal material of which the refractive  
index anisotropy is specified to vary with wavelengths of rays of  
light within a range that allows no viewing angle dependent  
coloration to occur to an image displayed on the liquid crystal  
display element;~~
  - a pair of polarizers disposed so as to sandwich said liquid  
crystal display element; and
  - at least one phase difference plate , each of said at least one  
phase difference plate defining a surface and being  
disposed between said liquid crystal display element and  
said pair of polarizers;

wherein (i) each of said at least one phase difference plate has three principal refractive indices  $n_a$ ,  $n_b$ , and  $n_c$ , (ii) said refractive indices are mutually related by the inequality  $n_a < n_b < n_c$ , (iii) the direction of said principal refractive index  $n_a$  coincides with the direction of a y – coordinate axis among x and y – coordinate axes on said surface, said y – coordinate axis being orthogonal to said normal, and (iv) the direction of said principal refractive index  $n_b$  inclines relative to the normal to said surface and to the direction of said x-coordinate axis, and

wherein the refractive index anisotropy  $\Delta n$  (550) of said liquid crystal material for rays of light having the wavelength of 550 nm is specified to be more than 0.060 and less than 0.120 , and

wherein the refractive index anisotropy of said liquid crystal material varies with other wavelengths of rays of light within a range that allows substantially no viewing angle dependent coloration to occur in an image displayed by said device.

2. (Cancelled)

3. (Previously Presented) The liquid crystal display device as defined in claim 1, wherein the refractive index anisotropy  $\Delta n$  (550) is specified to be not less than 0.065 and not more than 0.115.

4. (As originally filed) The liquid crystal display device as defined in claim 3,  
wherein the refractive index anisotropy  $\Delta n(550)$  is specified to be not less  
than 0.070 and not more than 0.095.
5. (Currently Amended) The liquid crystal display device as defined in claim 1,  
wherein the inclination angle of the principal refractive index  ~~$n_b$~~   $n_b$  of the  
phase difference plate is specified to be in the range from 15° to 75°.
6. (Currently Amended) A liquid crystal display device, comprising:  
a liquid crystal display element including :
  - a pair of substrates, and
  - a liquid crystal layer sandwiched by said substrates and  
~~constituted by a liquid crystal material of which the~~  
~~refractive index anisotropy is specified to vary with~~  
~~wavelengths of rays of light within a range that allows no~~  
~~viewing angle dependent coloration to occur to an image~~  
~~displayed on the liquid crystal display element;~~
  - a pair of polarizers disposed so as to sandwich said liquid  
crystal display element; and
  - at least one phase difference plate, each of said at least one  
phase difference plate defining a surface and being  
disposed between said liquid crystal display element and  
said pair of polarizers;
  - wherein each of said at least one phase difference plate (i)  
has three principal refractive indices  $n_a$ ,  $n_b$ , and  $n_c$ ,

(ii) said refractive indices are mutually related by the inequality  $n_a < n_b < n_c$ , (iii) the direction of said principal refractive index  $n_a$  coincides with the direction of a y – coordinate axis among x and y – coordinate axes on said surface, said y – coordinate axis being orthogonal to said normal, and (iv) the direction of the principal refractive index  $n_b$  inclines relative to the normal to said surface and to the direction of said x-coordinate axis, and wherein (i) the refractive index anisotropy  $\Delta n$  (550) of the liquid crystal material for rays of light having the wavelength of 550 nm is specified to be more than 0.060 and less than 0.120, (ii)  $\Delta n$  (450) -  $\Delta n$  (650), i.e., the difference between the refractive index anisotropy  $\Delta n$  (450) of the liquid crystal material for rays of light having a wavelength of 450 nm and the refractive index anisotropy  $\Delta n$  (650) thereof for rays of light having the wavelength of 650 nm, is specified to be not less than 0.0070 and not more than 0.0250, and (iii) the refractive index anisotropy of said liquid crystal material varies with other wavelengths of rays of light within a range that allows substantially no viewing angle dependent coloration to occur in an image displayed by said device.

7. (As originally filed) The liquid crystal display device defined in claim 6, wherein  $\Delta n(450) - \Delta n(650)$  is specified to be not less than 0.0200 and not more than 0.0250.

8. (Currently Amended) The liquid crystal display device as defined in claim 6, wherein the inclination angle of the principal refractive index ~~n<sub>b</sub>~~ n<sub>b</sub> of the phase difference plate is specified to be in the range from 15° to 75°.

9. (Cancelled)

10. (Previously Presented) The liquid crystal display device as defined in claim 6, wherein the refractive index anisotropy  $\Delta n$  (550) is specified to be not less than 0.065 and not more than 0.115.

11. (As originally filed) The liquid crystal display device as defined in claim 10, wherein the refractive index anisotropy  $\Delta n$  (550) is specified to be not less than 0.070 and not more than 0.095.

12. (Cancelled)

13. (Previously Presented) The liquid crystal display device as defined in claim 6, wherein the optical phase difference plate includes:  
a support base composed of a transparent organic high polymer;  
and  
a liquid crystal polymer layer formed on the support base to be aligned to possess oblique orientation and crosslinked.

14. (Previously Presented) The liquid crystal display device as defined in claim 8, wherein the optical phase difference plate includes:  
a support base composed of a transparent organic high polymer;  
and  
a liquid crystal polymer layer formed on the support base to be aligned to possess hybrid orientation and crosslinked.

15. (Cancelled)

16. (Cancelled)

17. (Cancelled)

18. (Cancelled)

19. (Cancelled)

20. (Cancelled)

21. (Cancelled)

22. (Cancelled)

23. (Cancelled)

24. (Cancelled)

25. (Cancelled)

26. (Cancelled)

27. (Cancelled)

28. (Cancelled)

29. (Previously Presented) A liquid crystal display device, comprising:
- a liquid crystal display element including a liquid crystal layer sandwiched by a pair of light-transmitting substrates each having an electrode layer provided thereon;
  - a pair of polarizers disposed so as to sandwich said liquid crystal display element; and
  - at least one phase difference plate, each said phase difference plate defining a surface and being disposed between said liquid crystal display element and said pair of polarizers, wherein the improvement comprises (i) each of said at least one phase difference plate having three principal refractive indices  $n_a$ ,  $n_b$ , and  $n_c$  being mutually related by the inequality  $n_a < n_b < n_c$ , the direction of the principal refractive index  $n_a$  coinciding with the direction of a y-coordinate axis among x and y-coordinate axes on each said surface of said at least one phase difference plate, the y-coordinate axis being orthogonal to said normal, and the direction of the principal refractive index  $n_b$  inclining relative to the normal to said surface and to the direction of said x-coordinate axis, and, (ii) the refractive index anisotropy  $\Delta n$  (550) of the liquid crystal material for rays of light having the wavelength of 550 nm being specified to be more than 0.060 and less than 0.120, (iii)  $\Delta n$  (450) -  $\Delta n$  (650), i.e., the difference between the refractive index anisotropy  $\Delta n$  (450) of the liquid crystal material for rays of light having a wavelength of 450 nm and the refractive



index anisotropy  $\Delta n(650)$  thereof for rays of light having the wavelength of 650 nm, being specified to be not less than 0.0070 and not more than 0.0250, and (iv) the refractive index anisotropy of said liquid crystal material being specified to vary with other wavelengths of rays of light within a range that allows substantially no viewing-angle dependent coloration to occur on a displayed image.

30. (Cancelled)

31. (Twice Amended) A liquid crystal display device, comprising:

a liquid crystal display element including:

a pair of substrates, and

a liquid crystal layer sandwiched between said substrates and constituted by a liquid crystal material of which the refractive index anisotropy is specified to vary with wavelengths of rays of light within a range that allows no viewing angle dependent coloration to occur to an image displayed on the liquid crystal display element;

a pair of polarizers disposed so as to sandwich said liquid crystal display element; and

at least one phase difference plate, each said at least one phase difference plate defining a surface and being disposed between said liquid crystal display element and said pair of polarizers,

wherein (i) each of said at least one phase difference plate has three principal refractive indices  $n_a$ ,  $n_b$ , and  $n_c$  being mutually related by the inequality  $n_a < n_b < n_c$ , (ii) the direction of the principal refractive index  $n_a$  coincides with the direction of a y-coordinate axis among x and y-coordinate axes on each said surface of said at least one phase difference plate, the y-coordinate axis being orthogonal to said normal, and (iv) the direction of the principal refractive index  $n_b$  inclines relative to the normal to said surface and to the direction of said x-coordinate axis;

wherein  $\Delta n(450) - \Delta n(650)$ , i.e., the difference between the refractive index anisotropy  $\Delta n(450)$  of the liquid crystal material for rays of light having a wavelength of 450 nm and the refractive index anisotropy  $\Delta n(650)$  thereof for rays of light having the wavelength of 650 nm, is specified to be not less than 0.0070 and not more than 0.0250, and

wherein the refractive index anisotropy of said liquid crystal material varies with other wavelengths of rays of light within a range that allows substantially no viewing angle dependent coloration to occur in an image displayed by said device.

32. (Previously Presented) The liquid crystal display device as defined in claim 31, wherein the refractive index anisotropy  $\Delta n(550)$  of the liquid crystal material for rays of light having the wavelength of 550 nm is specified to be more than 0.060 and less than 0.120.

33. (Previously Presented) The liquid crystal display device as defined in claim 31, wherein the refractive index anisotropy  $\Delta n$  (550) is specified to be not less than 0.065 and not more than 0.115.
34. (Previously Presented) The liquid crystal display device as defined in claim 31, wherein the refractive index anisotropy  $\Delta n$  (550) is specified to be not less than 0.070 and not more than 0.095.
35. (Previously Presented) The liquid crystal display device as defined in claim 31, wherein  $\Delta n$  (450) –  $\Delta n$  (650) is specified to be not less than 0.0200 and not more than 0.0250.
36. (Previously Presented) The liquid crystal display device as defined in claim 32, wherein the refractive index anisotropy  $\Delta n$  (550) of the liquid crystal material for rays of light having the wavelength of 550 nm is specified to be not less than 0.065 and smaller than 0.115.
37. (Previously Presented) The liquid crystal display device as defined in claim 36, wherein the refractive index anisotropy  $\Delta n$  (550) is specified to be not less than 0.070 and not more than 0.095.
38. (Cancelled)

39. (Cancelled)

40. (Cancelled)

41. (Cancelled)

42. (Cancelled)

43. Cancelled)

44. (Cancelled)

45. (Cancelled)

46. (Cancelled)

47. (Cancelled)

48. (Previously Presented) The liquid crystal display as defined in claim 31,  
wherein the inclination angle of the principal refractive index  $n_b$  of  
the phase difference plate is specified to be in the range from 15°  
to 75°.